Practice-Based Article

Practical Techniques for Being More Creative at Work

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ABSTRACT

This article outlines simple strategies and techniques for applying creativity to your own daily work in a library setting, by developing a growth mindset. It discusses the psychology of being creative, and how everyone can realise their true potential to achieve it and explains that inspiration occurs at any moment, anywhere, providing insightful novel approaches for solving complex problems. Creativity compels us to step out of our comfort zone by taking a risk, to explore something new. Realising the true value of the experience itself, is the actual learning involved and not being afraid to repeatedly make mistakes and try again.

KEYWORDS

creativity, work, advice, Artificial Intelligence, critical thinking

INTRODUCTION

How do you know if you are already being creative at work?

In considering this question and applying it to your own work, the answer depends on how you define the term creative. The literature discusses creativity as an ambiguous concept normally in terms of motivation, innovation and problem solving (Reilly, 2017). From my own experience of working in an academic library environment for nearly two decades, these are all essential qualities, which contribute towards the delivery of a successful library service to patrons. Over the years in collaboration with faculty, I developed creative approaches for teaching information literacy to engage diverse cohorts of business students in deep learning. For a more detailed discussion on cultivating a creative learning environment to ensure student engagement see (Reilly, 2015).

Reflecting on my own teaching practice, I generally only have one opportunity to make an impact on these students and employ playful learning techniques to engage them from the start of the session. As an icebreaker task to ensure active participation, I use an abstract image of a square wooden box attached to the top of a rock (see Figure 1). I explain to the group that I discovered this object strewn among the rocks while walking along a beach and have no idea of its purpose.

The aim of this task is to provoke a reaction from students, which is known as "Effective Surprise" while encouraging collaboration and peer to peer learning. The cognitive psychologist Jerome Bruner described "Effective Surprise" as something which provokes a reaction and occurs in ordinary situations and is not

unusual or bizarre (Bruner, 1962). All students seem to enjoy this task. They form their own groups to devise a list of keywords to describe the image and embrace the challenge of thinking critically while competing against each other. The learning outcome from this exercise is that students realise the value of brainstorming a list of keywords as a means to developing an effective search strategy for searching and critically evaluating online resources.

Figure 1: Square wooden box on rocks



Another lens in which to approach creativity, is to view it in terms of problem solving. When you think about it from this perspective you are already being creative but may not actually realise it. On a daily basis in the workplace, we are constantly problem solving in terms of overcoming both large and small challenges. We are internally motivated to succeed, as we do not want to disappoint ourselves or, the person who originally asked the question.

Sometimes the best solution to clarifying a problem is to refine it further by asking another probing question., such as the following: "What does it mean to be creative in an Artificially Intelligent pervasive work environment?" Artificial Intelligence (AI) poses new challenges, and we need to learn to become comfortable collaborating with it. This involves the successful integration of this rapidly evolving technology into our own workflow. Used responsibly and ethically it provides an opportunity to both embrace our creativity and expand our imaginations. Image generating AI such as 'Dall-E' and Canva's 'Magic Media' facilitates us to explore our curiosity by expressing ideas visually. However, these tools have certain limitations due to the large language learning model they were trained on, and the inherent bias of their creator. These flaws are evident by the unusual and hallucinatory results they can produce. For example, after I instructed these tools to create images of the male literary characters "Tweedle Dum and Tweedle Dee" containing the words "curiosity and creativity", some of the attempts incorrectly portrayed them as female (See Fig. 2).

Figure 2: Tweedle Dum and Tweedle Dee generated by artificial intelligence



To be creative with this type of AI involves using very precise prompts and refining these further until you achieve the intended outcome. This process is like engaging with text-based AI, the main difference being the results are more interesting and visually appealing.

6Ds of Solution Fluency

Another strategy for collaborating with AI is the "6Ds of Solution Fluency", a creative approach to problem solving applicable to any domain. It was developed by the Global Digital Citizen Foundation (2015). This simple six-step process outlined in figure 3 for solving problems creatively, can apply to any task big or small. Students really like the simplicity of this technique which encourages critical thinking to complete assignments and research projects. The next time you encounter a problem, apply this simple strategy and see if it results in a successful solution. The table (See Fig. 3) provides more details about each of the individual stages. This creative approach to problem solving is closely related to Design Thinking which is explored in the next section.

Figure 3: 6Ds of Solution Fluency

6 Ds of Solution Fluency	Description
Define	Consider the scope of your research topic or problem
Discover	Explore what information is already available on the topic
Dream	Visualize yourself solving the problem well before the allotted deadline
Design	Identify the various stages involved in the process to achieve a successful outcome for solving the problem.
Deliver	Complete and submit your topic in advance of the due date
Debrief	Reflect on the lessons learned from completing this topic

Applying the Principles of Design Thinking:

Design thinking concerns taking a large problem and subdividing into smaller more manageable ones, which makes them easier to solve. In his best-selling book "Thinkertoys" the Psychologist Michael Michalko (2006) calls this technique "to centre a challenge". He recommends always beginning by applying the phrase "In what way might I…?" to the problem itself. This process is repeated several times until all aspects of the problem are considered. These now become subproblems which are solvable, and are stretched further by asking the questions "How else?" and "Why else?" (Michalko, 2006). User Experience or UX now popular in libraries involves thinking about the problem in the user's shoes or from their perspective (UXLibs, n.d.). This concept places the user at the centre and emphasises building the system or service around them rather than vice versa (Young et al., 2020).

Andy Priestner applies a UX Research & Design Process Model for UX in libraries (Priestner, 2021). This model proposes 4 phases:

- Research user needs and behaviours.
- Code and theme user data.
- Ideate and devise protoypes.
- Test and refine prototypes.

Ideation is the process where a group generates many ideas quickly by engaging in both convergent and divergent thinking (Priestner, 2021). Play is integral to this process as it lets us expand our imagination by brainstorming both daft and conventional ideas, which all have equal value. Each one of the ideas is written on different coloured Post-it® notes and stuck on a notice board. Group members are then invited to select their favourites. After a process of elimination, one idea is selected. The next stage is prototyping, an

effective and cheap way to test out the most popular idea. This involves using cheap materials such as cardboard and adhesive tape, aluminium foil or whatever is available at hand to build a rough prototype or model. The idea now becomes more concrete and is easier to refine further by solving the problem with both hands and mind. Immediately you can see what works and where the potential obstacles lie. At my own institution when we were considering a redesign of the Librarian's Consultation Desk, I built a small-scale prototype model of the proposed desk using cardboard. This allowed us to move components around to test out their functionality and optimise the final design.

Applying Creative Techniques to Daily Work

Outlined below, based on my own experience are six practical steps you can take in applying simple creative techniques to your daily work. Creativity involves being confident to step out of your comfort zone and take a risk by following your curiosity to try something new and learn from the experience. American choreographer and dancer Twyla Tharp suggests the first step to conquering failure is to acknowledge it (Tharp, 2003) and to not be afraid to constantly repeat and refine the process until it becomes second nature to you. Although her book 'The Creative Habit' is over twenty years old, it provides insight and practical tips which are still relevant today.

Step 1 - Reframe Problems

Reframing a problem makes it more manageable while providing a different perspective to explore it. Adopting this approach ensures you are already halfway there to solving it, as something which initially seems quite overwhelming may not be as difficult as originally anticipated. One of the most enjoyable experiences for any individual is the process of playing with ideas, which leads to a new discovery. This only occurs if the person feels they possess the requisite skills and knowledge to solve it. To achieve this involves setting the problem aside and devoting their attention to something else. This allows their subconscious time to still work on it and provide a solution when they least expect it (Csikszentmihalyi, 1996).

Step 2 - Brighten up a Dull Wall Space

Use old postcards, humorous birthday cards, or any other visually appealing material to decorate a blank wall at your workspace. Children's art can be highly effective as it normally consists of bright colours. Emotionally this gallery of images has a positive impact on your mood by appealing to the senses and serves as an inspiring space for generating ideas. It will also subconsciously encourage you to think in terms of pictures rather than in text, when communicating ideas.

Step 3 – Seek out Collaborators

Collaborating with other colleagues both within and outside your organisation is personally rewarding which contributes to improving productivity. It also provides opportunities for working on larger type projects, which improves skills, knowledge sharing and networking. Members of these teams motivate and inspire each other to succeed and overcome any unforeseen challenges they encounter. Another benefit is that a person can achieve more collaborating as part of a work team, rather than operating in a solo capacity.

Step 4 - Learn to Think Differently

To think differently is a skill, which requires practice, but begins to feel quite liberating once it becomes a habit. Ideas that originally seemed impossible by conventional thinking are suddenly achievable. Adopting a holistic view to overcoming a challenge allows you to see the bigger picture and all its interconnecting parts. Problems become more interesting and mysterious when interpreted from a different perspective. According to David Bohm, to obtain a creative solution to a problem requires pure thought, which is achieved by suspending all preconceived notions or ideas about it (Bohm & Nichol, 2003).

One example I use to explain this concept to graduate students undertaking their dissertation, is a photo of frost on my car roof. (See Fig. 4). I frame this picture on a PowerPoint slide and ask them to identify what they think it is. The answers provided reveal the students' prior learning, and I probe them further to ascertain their thought process. I explain to the group that looking at something from a different perspective makes it more mysterious and interesting to the viewer. As frost is something which we take for granted in the winter and consider it quite mundane. However, present it out of context and it suddenly becomes unrecognizable, magical and quite ambiguous. They can adopt a similar approach to devising their own research question.

Figure 4: Frost patterns on car roof



Step 5 - Work within Boundaries

Always define limits for completing a certain task, this compels you to be more resourceful by challenging your critical thinking. To be effective, creative individuals need to operate within certain boundaries, allowing them to focus their mind on the kernel of the problem. Otherwise, the challenge becomes too unwieldy and eventually overwhelms them due to lack of any coherent structure. Luckily in a work environment, these boundaries are often imposed by constraints such as project deadlines and scheduling of classes.

Step 6 – Use your own images

To be inspired by your environment is a wonderful experience, and taking photos to capture these moments is both rewarding and empowering. The advantages of using your own images in future presentations means there are no copyright issue concerns. It allows you total creative control over the context in which they are used to either engage an audience or convey an idea. Always realise that inspiration can come from anywhere and follow your curiosity to capture something that is visually appealing whether it's a place or an object. One example is a broken melted ice cream cone lying on the ground, (See Figure 5 for more details). I have used this abstract image as an icebreaker task in my workshops to engage hundreds of students over many years, like the process outlined earlier in this article for the square wooden box on the rocks.

Figure 5: Broken and melted ice-cream cone lying on the ground



CONCLUSION

All the ideas discussed in this article are easy to incorporate within your own daily workflow. Although, some may require more practice than others to master them. Start small by trying out one of the above mentioned six steps to build up your creative confidence slowly. You will be surprised how quickly they start to form part of your normal routine. Explore and experiment with any of the examples mentioned and adapt or modify them for your own teaching purposes. Gradually you begin to think visually rather than with text when devising presentations which is more engaging for an audience. This allows you to explore your imagination and thought process further by conveying complex ideas succinctly in pictures, ultimately stimulating you to become more aware, observant and curious about the world around us.

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